

## Safety Data Sheet

# Test gas bottle 0.4 l with 17.5 % vol. oxygen

### Safety Data Sheet in compliance with Regulation (EC) No 1907/2006 (as amended by Regulation (EU) No 453/2010)

Safety data sheet no:	108372
Version:	3
Creation date:	14.08.2017
Valid from:	14.08.2017
Replaces version:	2

### 1. Identification of the substance/mixture and of the company/undertaking

#### Product identifier

Substance name/trade name:	Test gas, nitrogen with 17.5 % vol. O <sub>2</sub> in 0.4 l gas bottle.
Product code:	ZT10-10018, 9511-0068 (refill)
Index no:	---
EC no:	---
CAS no:	---
REACH registration no:	Listed in Annex IV/V REACH, exempted from registration.
Other means of identification:	Test gas bottle 17.5 % vol. O <sub>2</sub> , Test gas 17.5 % vol. O <sub>2</sub>
Uses:	Industrial and professional.

#### Details of the supplier of the safety data sheet


Manufacturer/supplier:	Hermann Sewerin GmbH
Street address:	Robert-Bosch-Straße 3
City/town, country:	33334 Gütersloh, Germany
Email:	<a href="mailto:info@sewerin.com">info@sewerin.com</a>
Telephone/fax:	+49 (0)5241 934444
Emergency telephone number:	+49 (0)5241 934333 (office hours)

## 2. Hazards identification

### Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008, Annex VII:	Gases under pressure – compressed gases – caution (H280).
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### Label elements in accordance with Regulation (EC) No 1272/2008:

Pictogram/hazard symbol:	
Signal word/indication of danger:	Caution.
Hazard statements (H statements)	H280: Contains gas under pressure; may explode if heated.
Precautionary statements (P statements)	P410+P403: Protect from sunlight. Store in a well-ventilated place.

## 3. Composition/information on ingredients

Substance/mixture:	Mixture
Substance name, component A:	Nitrogen
Concentration of component A:	82.5 %
Index no, component A:	---
EC no, component A:	231-783-9
CAS no, component A:	7727-37-9
Substance name, component B:	Oxygen
Concentration of component B:	17.5 %
Index no, component B:	008-001-00-8
EC no, component B:	231-956-9
CAS no, component B:	7782-44-7

<b>4. First aid measures</b>	
<b>Description of first aid measures</b>	
Inhalation:	In high concentrations may cause asphyxiation. Symptoms may include loss of mobility and consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing has stopped.
Skin contact:	Skin contact is not considered a potential route of exposure.
Eye contact:	Eye contact is not considered a potential route of exposure.
Ingestion:	Ingestion is not considered a potential route of exposure.
Most important symptoms and effects, both acute and delayed:	Asphyxiation, loss of mobility and consciousness.
Indication of any immediate medical attention and special treatment needed	Apply artificial respiration if breathing has stopped.

<b>5. Firefighting measures</b>	
<b>Extinguishing media</b>	
Suitable extinguishing media:	Any known extinguishing media may be used.
Unsuitable extinguishing media:	None known.
<b>Special hazards arising from the substance or mixture</b>	
Specific hazards:	Exposure to fire may cause containers to rupture/explode.
Hazardous combustion products:	Incomplete combustion may form carbon monoxide.
<b>Advice for firefighters</b>	
Specific methods:	If possible, stop gas leakage. Move away from container and cool with water from a protected position.
Special protective equipment for firefighters:	In confined spaces use self-contained breathing apparatus.
Indication of any immediate medical attention and special treatment needed:	Apply artificial respiration if breathing has stopped.

<b>6. Accidental release measures</b>	
Personal precautions, protective equipment and emergency procedures:	Clear the area. Ensure adequate air ventilation. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Environmental precautions:	Try to stop gas release.
Methods and material for containment and cleaning up:	Ventilate area.
Reference to other sections:	---

<b>7. Handling and storage</b>	
<b>Precautions for safe handling</b>	
Measures to prevent fire and explosion:	Open valves slowly to prevent pressure spikes. Do not allow water to enter the container. Do not allow backfeed into the container. Use only equipment that is suitable for this product, its supply pressure and temperature. Secure pressure vessels (pressure cylinders) to prevent them from overturning.
Measures to prevent dust and aerosol generation:	---
Measures to protect the environment:	---
General hygiene precautions:	---
<b>Conditions for safe storage, including any incompatibilities</b>	
Information on storage conditions:	Store containers below 50 °C in a well-ventilated location. Secure pressure vessels (pressure cylinders) to prevent them from overturning.
Requirements for storage areas and containers:	---
<b>Specific end use(s)</b>	
Industry or sector-specific guidance:	---

<b>8. Exposure controls/personal protection</b>	
<b>Occupational exposure limits and/or biological limits</b>	
<b>Occupational exposure limits for Germany</b>	
Substance name, CAS no:	---
Specification:	---
Value:	---
Acceptable peak concentration:	---
Teratogenic:	---
Monitoring procedures:	---
<b>DNEL and PNEC values</b>	
Substance name, CAS no:	---
Specification:	---
Value:	---
<b>Control banding (e.g. ILO, EMKG)</b>	
Relevant parameters/classification:	---
Relevant protection guidelines:	---
Value:	---
<b>Exposure controls</b>	
Appropriate engineering controls:	Provide general and local ventilation/extraction to keep concentrations below explosion limits and/or to comply with occupational exposure limits (where applicable).
Individual protection measures, such as personal protective equipment:	Ensure adequate ventilation. No smoking when handling the product.
Environmental exposure controls:	---



<b>9. Physical and chemical properties</b>	
Appearance, state of aggregation:	Gas.
Colour:	Colourless gas.
Odour:	No perceptible odour.
Molecular weight:	---
Melting point:	---
Boiling point:	---
Critical temperature:	---
Vapour pressure:	Not applicable.
Relative density, gas (air =1):	Density similar to air
Solubility in water:	Nitrogen (component A): 20 mg/l, Oxygen (component B): 39 mg/l
Flammability range:	None.
Ignition temperature:	None.

<b>10. Stability and reactivity</b>	
Reactivity:	Unreactive under normal temperature and pressure conditions.
Chemical stability:	Stable under normal temperature and pressure conditions.
Possibility of hazardous reactions:	None.
Conditions to avoid:	None.
Incompatible materials:	None.
Hazardous decomposition products:	None.

<b>11. Toxicological information</b>	
Information on toxicological effects:	There are no known toxic effects associated with this product.

<b>12. Ecological information</b>	
Toxicity:	This product has no known eco-toxicological effects.
Persistence and degradability:	No data available.
Bioaccumulative potential:	No data available.
Mobility in soil:	No data available.
Results of PBT and vPvB assessment:	No data available.
Other adverse effects:	No data available.

<b>13. Disposal considerations</b>	
Waste treatment methods:	Prevent runoff into sewerage systems, cellars, working pits and similar places where accumulation of the gas could be dangerous. Contact supplier if guidance is required.
Treatment of contaminated packaging:	Contact supplier for special recommendations. Recycling: 15 01 04 Metallic packaging.
Waste code in accordance with the German Waste Ordinance (AVV):	16 05 05 – Gases in pressure containers other than those mentioned in 16 05 04.
Special precautions:	---
Relevant EU or other provisions:	---

<b>14. Transport information</b>	
UN number:	UN 1956
Classification under ADR/RID regulations:	 2.2: Non-flammable non-toxic gases.
Classification under IMDG Code/ICAO-TI/IATA-DGR regulations:	 2.2: Non-flammable non-toxic gases.
<b>Surface transport</b>	
HI no:	---
UN proper shipping name:	UN 1956 COMPRESSED GAS, N.O.S. (nitrogen, oxygen), 2.2, (E)
Transport hazard class(es):	2
Classification code:	1 A
Packing group:	---
Packing instruction(s):	P200
Tunnel restriction:	E: Passage forbidden through tunnels of category E
ADR limited quantities:	No exemption.

<b>Transport by sea</b>	
GGVSee/IMO-IMDG code:	Class 2
Description of the goods:	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)
Class:	2.2
Packing group:	P200
EMS:	F-C, S-V
<b>Air transport</b>	
ICAO/IATA-DGR:	Packing instruction (cargo): 200 Packing instruction (passenger): 200
Technical name:	COMPRESSED GAS, N.O.S. (nitrogen, oxygen)
Class:	2.2
IATA packing group:	---
IATA passenger and cargo aircraft:	Allowed.
Packing instruction:	200, 75 kg
Cargo aircraft only:	Allowed.
Packing instruction:	200, 150 kg
<b>Environmental hazards - Indication of environmentally hazardous substances</b>	
ADR/RID / IMDG Code / ICAO-TI / IATA-DGR:	None.
Marine pollutant:	None.
<b>Special precautions for user</b>	
Other transport information:	Where possible avoid transport in vehicles where the load space is not separated from the driver's compartment. Secure gas cylinders. Cylinder valves must be closed and not leaking. Ensure that the valve protection device (where provided) is correctly fitted. Ensure that the valve lock nut is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

## 15. Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

European requirements:	Regulation EG No. 1907/2006 (REACH). Regulation EG No. 1272/2008 (CLP).
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### National regulations:

	Ensure compliance with all national and local regulations.
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<b>16. Other information</b>	
Changes to the previous version:	Section 15.
Training for employees:	<a href="http://www.industriegaseverband.de">www.industriegaseverband.de</a> <a href="http://www.eiga.org/">http://www.eiga.org/</a>
Conversion of units:	0.001 % vol. = 10 ppm
Further information:	The risk of asphyxiation is often overlooked and must be stressed during operator training. Before using the product in any new process or experiment, a thorough material compatibility and safety study should be carried out. This information does not imply a contractual confirmation of product characteristics. It is based on current knowledge.

108372 – 14.08.2017 – Subject to technical changes.